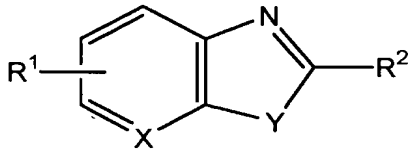
WHAT IS CLAIMED IS:

1. A method for inhibiting 5-lipoxygenase in a subject, comprising administering a compound of formula (I) or a pharmaceutically acceptable salt thereof to the subject in an amount effective for the inhibition of 5-lipoxygenase:



(I)

wherein

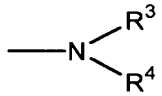
X is CH or N;

Y is S or O;

R^1 is H, OH, halogen, C_{1-6} alkyl, nitro, cyano, amino, di-C_{1-6} alkylamino, C_{1-6} alkoxy, C_{1-6} hydroxyalkyl or C_{1-6} alkylcarbonyl; and

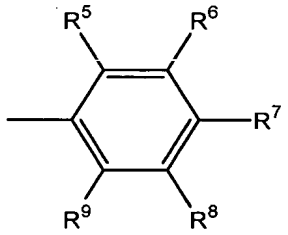
R^2 is

(i)



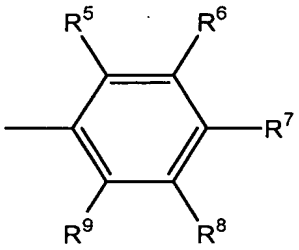
wherein R^3 is H or C_{1-6} alkyl;

R^4 is



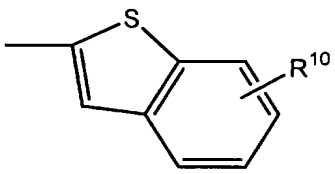
wherein R^5, R^6, R^7, R^8 and R^9 are independently H, OH, halogen, C_{1-6} alkyl, C_{1-6} haloalkyl, nitro, cyano, amino, di-C_{1-6} alkylamino, mercapto, C_{1-6} mercaptoalkyl, halogen-substituted C_{1-6} mercaptoalkyl, phenylazo, C_{1-6} alkylphenylazo, C_{1-6} alkylcarbonyl, C_{1-6} alkoxy or C_{1-6} hydroxyalkyl,

(ii)



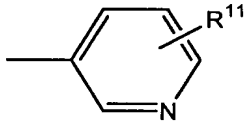
wherein R^5, R^6, R^7, R^8 and R^9 are as defined in (i),

(iii)



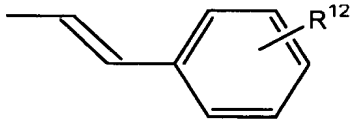
wherein R^{10} is H or C_{1-6} alkyl,

(iv)



wherein R^{11} is H, C_{1-6} alkyl, halogen, mercapto or C_{1-6} mercaptoalkyl, or

(v)



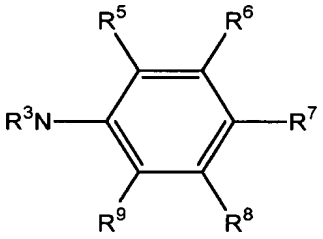
wherein R^{12} is H, OH, halogen, C_{1-6} alkyl, nitro, cyano, amino, di-C_{1-6} alkylamino, C_{1-6} alkylcarbonyl, C_{1-6} alkoxy or C_{1-6} hydroxyalkyl.

2. The method of claim 1, which is used for preventing or treating a leukotriene-related disease selected from the group consisting of: asthma, pertussis, psoriasis, rheumatic arthritis, arthritis, inflammatory bowel disease,

cystic fibrosis, acute/chronic bronchitis, gout, sepsis, cardiac myoischemia, cardiac anaphylaxis, cerebrovascular convulsion, ischemia and allergic rhinitis.

3. The method of claim 2, wherein the disease is asthma.

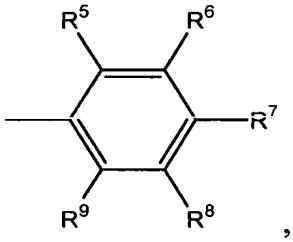
4. The method of claim 1, wherein R^2 is



wherein R^3, R^5, R^6, R^7, R^8 and R^9 are as defined in claim 1.

5. The method of claim 4, wherein R^1 is H, halogen, C_{1-6} alkyl or nitro; and R^5, R^6, R^7, R^8 and R^9 are independently H, halogen, C_{1-6} alkyl or phenylazo.

6. The method of claim 1, wherein R^2 is



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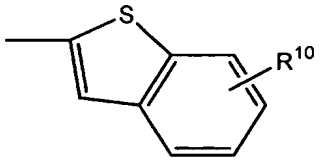

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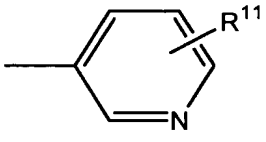

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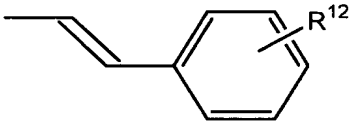
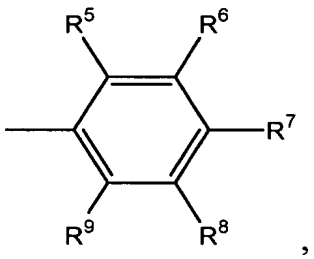


wherein R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11} and R^{12} are as defined in claim 1.

7. The method of claim 6, wherein R^1 is H or C_{1-6} alkyl; and R^2 is



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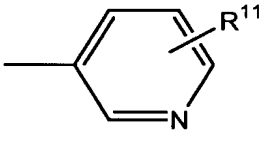

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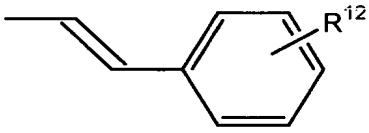
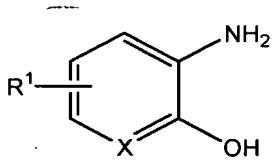


wherein R^5, R^6, R^7, R^8 and R^9 are, independently, H, halogen, C_{1-6} alkyl, C_{1-6} haloalkyl, nitro, cyano, amino, di-C_{1-6} alkylamino, mercapto, C_{1-6} mercaptoalkyl, halogen-substituted C_{1-6} mercaptoalkyl or C_{1-6} alkoxy;

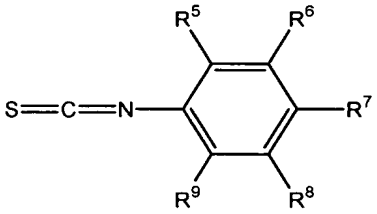
R^{11} is as defined in claim 1; and

R^{12} is H, halogen or C_{1-6} alkyl.

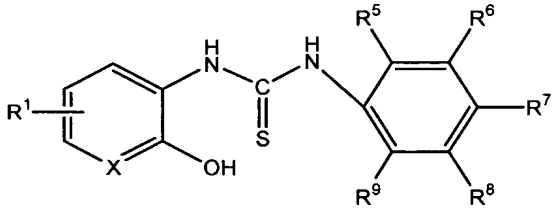
8. A method for preparing a compound of formula (I) comprising the steps of: (a) reacting a compound of formula (II) with a compound of formula (III) in an organic solvent to synthesize a thiourea intermediate of formula (IV); and (b) reacting the thiourea intermediate of formula (IV) with an acid to obtain a compound of formula (Ia) or (Ib):



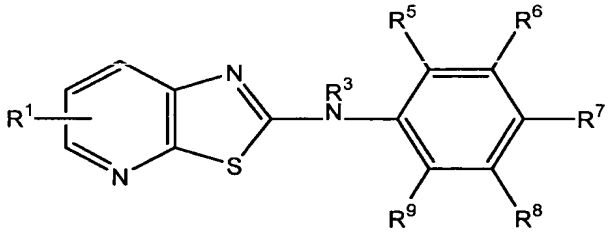
(II)



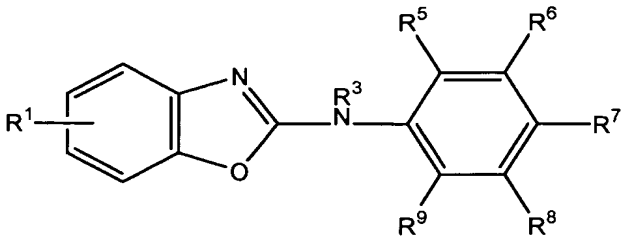
(III)



(IV)



(Ia)



(Ib)

wherein R^1, R^3, R^5, R^6, R^7, R^8 and R^9 are as defined in claim 1.

9. The method of claim 8, wherein the acid in step (b) is selected from the group consisting of trifluoroacetic acid, phosphoric acid, sulfuric acid, hydrochloric acid and nitric acid.